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PARFIX™ 4105
Cyanoacrylate Adhesive

PARFIX 4105 is a one component surface intensive cyanoacrylate adhesive with an extremely fast cure speed, high flow ability and good penetration characteristics.

PARFIX 4105 is specifically formulated to bond difficult surfaces with high industrial strength.

PARFIX 4105 is a low viscosity cyanoacrylate adhesive for multi purpose applications.

APPLICATIONS:

■ Acrylic	■ Polycarbonate	■ Polyimide	■ PVC
■ PEEK	■ PETG	■ Polysulfone	■ Wood
■ Steel	■ Stainless Steel	■ Aluminium	■ Zinc Dichromate
■ ABS	■ NRB	■ SBR	■ Glass

Adhesive Properties:

Composition:	Ethyl Cyanoacrylate
Appearance:	Clear liquid
Viscosity: (Brookfield LVF, Spindle)	1-5 cps @ 77°F / 25°C
Refractive Index (n D ²⁰)	1.439
Specific Gravity:	1.05
Flash Point:	176°F to 200°F / 80°C to 93°C

Curing Properties:

Shear Strength: (after 24 hours at 25°C)	
Shear Strength: (Steel)	19 - 21 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (Stainless Steel)	16 - 18 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (Aluminium)	17 - 19 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (Copper)	15 - 17 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (ABS)	4 - 6 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (PVC)	5 - 7 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (Polycarbonate)	8 - 12 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (Polystyrene)	3 - 4,5 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (NBR)	0.5 - 1 N/mm ² ASTM D 1002, DIN 53283
Shear Strength: (SBR)	0.5 - 1 N/mm ² ASTM D 1002, DIN 53283



Melting Point Temperature:	320 to 340°F / 160 to 170°C
Full Cure Time:	24 hours
Gap Filling:	0.05 mm
Temperature Range:	-60 to 180°F / -53 to 82°C

Typical Cure Speed

Fixture Time: (Steel)	10 - 30 sec.
Fixture Time: (Stainless Steel)	10 - 20 sec.
Fixture Time: (Aluminium)	5 - 15 sec.
Fixture Time: (Zink plated)	30 - 90 sec.
Fixture Time: (ABS)	5 -10 sec.
Fixture Time: (ABS to NBR)	3 - 5 sec.
Fixture Time: (ABS to Wood)	5 -10 sec.
Fixture Time: (NBR)	3 - 5 sec.
Fixture Time: (Wood)	50 - 60 sec.
Fixture Time: (Polycarbonate)	20 - 60 sec.

Physical and Electrical Properties:

Softening Point:	165°C	
Coefficient of Thermal Expansion:	100x10 ⁻⁶	ASTM D696 K ⁻¹
Dielectric Breakdown Strength:	25 kV/mm	ASTM D149
Coefficient of Thermal Conductivity:	0.1 W.m ⁻¹ K ⁻¹	ASTM C177
Volume resistivity:	2 - 10x10 ¹⁵ Ω.cm	ASTM D257
Surface resistivity:	10 to 80x10 ¹⁵ Ω.cm	ASTM D257
Dielectric constant:	2.5 @ 10 kHz	ASTM D150
Dielectric Dissipation Factor:	< 0.02 @ 10 kHz	

Application Method:

Surfaces should be dry, clean, and free of any contamination. Best result will be achieved with surfaces that have been lightly abraded immediately prior to bonding. If using accelerator apply to one component surface only. Apply thin film of adhesive to the other surface and bring the pieces together immediately. Hold for few seconds without disturbing the joints. When bonding "O" rings, cut a fresh surface onto each end of the rubber to gain the best possible strength. **Bonding Times:** Under normal conditions, the surface moisture initiates the curing process. Functional strength developed very quickly but curing process continues for at least 24 hours before full chemical/solvent resistance is developed. The rate of cure will depend on substrate used.

Storage:

Cyanoacrylate adhesives shall be ideally stored in a cool, dry place in unopened containers. For long term storage cyanoacrylate adhesives should be refrigerated or stored at temperatures below 46°F/8°C. The shelf life (stored at room temperatures) can be up to 1 year (modified cyanoacrylates 9 Months). If refrigerated, cyanoacrylates can remain within specifications for up to 2 years (modified cyanoacrylates 1 year).

PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Material Safety Data Sheets (MSDS) for this and all other products being used are understood by all persons who will work with the material. **Warranty:** All products purchased from or supplied by Parson are subject to terms and conditions set out in the contract. Parson warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Parson is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Parson makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will nor infringe any patent.